

H/A

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/615,464	YU, JIAN-SHEN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Daniel D. Chang	2819	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 7/5/05.
2. ☒ The allowed claim(s) is/are 1,3,4,7,9,11,12,15-18 and 20.
3. ☒ The drawings filed on 07 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

***Acknowledgement***

Receipt is acknowledged of the Amendment filed July 5, 2005.

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Popa on July 12, 2005.

The application has been amended as follows:

Claims 1 and 18, on last three lines, "six drains", "six sources", and "six gates" have been changed to --sixth drains--, --sixth sources--, and --sixth gates--.

***Reasons for Allowance***

Claims 1, 3, 4, 7, 9, 11, 12, 15-18, and 20 are allowable over the prior art of record.

The following is an examiner's statement of reasons for allowance: the best prior art of record, Nakajima et al., taken alone or in combination of other references, does not teach or fairly suggest a level-shifting circuit comprising, among other things, an enable circuit making the first output terminal output a predetermined voltage level signal when receiving a disable signals, wherein the enable circuit comprises: a MOS transistor having a fifth source and a fifth drain coupled between an external level and one of the first output terminal and the second

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output terminal, and a fifth gate coupled to the disable signal; and a pair of third NMOS transistors having sixth drains respectively coupled to the input terminal and the inverse input terminal, sixth sources coupled to the complementary pair of small signals, and sixth gates coupled to the disable signal (claim 1); an enable circuit causing the first output terminal to output a second voltage level signal independent of the first voltage level, wherein the enable circuit comprises: a MOS transistor having a fifth source and a fifth drain coupled between an external level and one of the first output terminal and the second output terminal, and a fifth gate coupled to the disable signal; and a pair of third NMOS transistors having sixth drains respectively coupled to the input terminal and the inverse input terminal, sixth sources coupled to the complementary pair of small signals, and sixth gates coupled to the disable signal (claim 1) (claim 18); and an enable circuit making the output terminal output a predetermined voltage level signal when receiving a disable signal wherein the enable circuit comprises: a thin film transistor (TFT) having a fifth source and a fifth drain coupled between an external level and the output terminal- and a fifth gate coupled to the disable signal; and a pair of first N-type thin film transistors having sixth drains respectively coupled to the first and second input terminals, sixth sources respectively receiving the reference signal and the modulating signal, and sixth gates coupled to the disable signal (claim 9), as set forth in the claims.

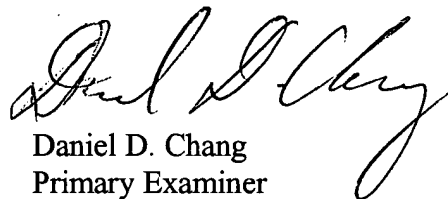
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel D. Chang  
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Art Unit 2819

dc

**DANIEL CHANG  
PRIMARY EXAMINER**